

Cellular, Molecular, and Developmental Track

Choose 12 credit hours from the following courses:

Course	Prerequisites	Semesters offered
*BIO 380 (1-4) Special Topics in Biology (Intermediate Level)	Determined by Instructor.	TBD
BIO 308 (3) Microbiology	BIO 304 or ABT 360 OR ENT 360 and CHE 130 or CHE 236	Fall/Spring
BIO 309 (2) Microbiology Lab	BIO 304 or ABT 360 OR ENT 360 and CHE 130 or CHE 236	Fall/Spring
BIO 429 (3) Developmental Biology	BIO 304 or equivalent, or graduate standing in life sciences, or consent of instructor.	Fall/Spring
BIO 494G (3) Immunobiology	BCH 401G (may be taken concurrently) and BIO 208 or BIO 308 or consent of instructor.	Fall/Spring
BIO 394/395/397 (1-3) Research in Neuroscience/Biology/Microbiology (max 3 credit hours toward track)	BIO 152 and BIO 302 or PSY 312 / BIO 148, BIO 152 and BIO 155 or equivalent. Completion of at least one of the Biology core courses (Cell Biology, Evolution, Genetics, Physiology, Ecology) is strongly recommended / BIO 308 and BIO 309.	Fall/Summer/Spring
BIO 495G (3) Bacterial Pathogenesis	BIO 308, BIO 315, BCH 401 recommended, or permission of instructor.	Spring
BIO 502 (5) Principles of Systems, Cell/Molecular Physiology	One year each, physics, general chemistry; PGY 206 or its equivalent.	Fall
BIO 510 (4) Recombinant DNA Techniques Lab	BIO 304 and BIO 315 or equivalent with consent of instructor.	Fall
BIO 520 (3) Bioinformatics	BIO 315 or BIO 304 or BCH 304 or BCH 401 or instructor. BCH 501 or BCH 502 or BIO 510 or consent of instructor.	Fall
BIO 527 (3) Stem Cells, Tissue Engineering, and Regenerative Medicine	BIO 315 and BIO 304.	
BIO 582 (3) Virology	BIO 304 and biochemistry or equivalent strongly recommended, or consent of instructor.	Fall
BIO 542 (5) Histology	BIO 315 or consent of instructor.	Spring
BIO 410 (3) Vertebrate Endocrinology	BIO 302 or BIO 315 or BIO 350	Spring

BIO 315 (4) Cell Biology**	BIO 303 and BIO 304; coreq: CHE 230 or equivalent; or consent of instructor.	Fall/Spring/sometimes Summer
----------------------------	--	------------------------------

***Subtitle must be approved by Director of Undergraduate Studies**

****only for B.A. students who do not use the course to fulfill the 2nd Tier Core**

Courses from outside the Biology Department:

Course	Prerequisites	Semesters offered
BCH 401G (3) Fundamentals of Biochemistry	CHE 107, CHE 236 and BIO 152 or equivalent.	Fall/Spring/ sometimes Summer
CHE 233 (1) Organic Chemistry Laboratory II OR CHE 533 (2) Advanced Organic Chemistry Laboratory	CHE 231; prereq or concur: CHE 232. CHE 532	Fall/Spring/Summer Fall/Spring
CHE 550 (3) Biological Chemistry I	CHE 232	Fall
CHE 552 (3) Biological Chemistry II	CHE 232	Spring
CHE 532 (2) Spectrometric Identification of Organic Molecules	CHE 231 and CHE 232	Fall
MI/PAT 598 (3) Clinical Microbiology	BIO 208 and 209, BIO 476G recommended, CHE 230 or 236, or consent of instructor.	Spring
ANA 442 (3) Molecular and Cellular Neurobiology	BIO 152 or an equivalent; BIO 302 or PSY 312, or consent of course director.	Spring

**** Other courses can be accepted by the Director of Undergraduate Studies in Biology on a case by case basis.**